Beware the Flu! Hidden Wonders Under the Microscope

about due. Scattered refluenza.
"This bacillus was, indeed, pres-



Dr. Henry Williams

that the disease

of last winter was a very dreadful veloping individual immunity? visitation. It swept across the coun-medicine. Every one knows, at least of the population.

UR medical scientists have last winter was such as to make it issued warnings that a sec. more than doubtful whether the ond epidemic of influenza is Pfeiffer bacillus is the cause of in-

ports dating for several weeks back ent, particularly at the early stage already testify to its presence in of the epidemic; but subsequently various parts of it was much less in evidence, and the country, al- the attention of the pathologists though the cases centered on several other groups of micro-organisms, including the four are not so nu-types of pneumococci (pneumonia merous as to war- germs) and various streptococci rant the assertion and staphylococci of ill repute.

"The germ that thus breaks down the bodily defences, producing the symptoms of the initial influenza, tained to the pro- is for the moment effectively hidden portions of an from the searching eye of the microepidemic. Never- scope, as the cannon that tore down theless, slender the barbed wire entanglements and hope is held out weakened the morale of the enemy were hidden from the searching that the plague, fieldglasses of the air scouts. . .

should it come, "It becomes a very practical will be less severe than it was last question as to what the average indiwinter. And as yet no analysis has vidual can do to guard against the demonstrated either cause or cure probability of being attacked by the malady. Science, it appears, cannot as yet tell us just what the influenza No one, says Henry Smith Will- germ is, nor precisely how it is iams, M.D., LL.D., needs to be re- transmitted. Can it tell us anyminded that the influenza epidemic thing definite as to methods of de-

try in successive waves, and, ac- in general terms, the story of the cording to the best estimates avail- virtual conquest of typhoid fever able, caused something like four hun- that was effected through applicadred and fifty thousand deaths, or tion of Sir Almroth Wright's vacmore than four for every thousand consists of inoculating the subject last night. Row after row of shinwith a culture containing dead ing brass instruments and a crowd A very important and timely ar- typhoid bacilli. These germs conticle by this scientist appears in the vey the typhoid toxin in limited of people passing from one to the October issue of "Physical Culture." quantity, and they stimulate the other, taking a short look down a organism to produce the so-called short brass tube and then moving on anti-bodies that give defense against to the next one. "Every one knows that the great this particular invasion. Presently danger in influenza is the develop- the body is charged with typhoid ment of pneumonia. It is reported antidotes in such quantity that queries the visitor.

smaller towns of Maryland. There "It is well known that this prinwas, however, no close correspond- ciple of preventive inoculation with I've never seen it before." ence between the pneumonia rate various other maladies, though no- less you saw it through a compound of the water. This tip is the outlet and the influenza attack rates. As where else with results quite so microscope like this," quoth the of a tube that conveys air to his to the mortality, there was also great variation, deaths amounting an attempt was made to produce a spectacular as in typhoid. Naturally an attempt was made to produce a couple of oil on the water the tube becomes to only 1,9 per thousand in Spar- vaccine that would give immunity pens that you can put a couple of oil on the water the tube becomes tanburg and rising to 6.8 in Mary- against influenza. In point of fact, thousand of them in a square inch. clogged and the mosquito, unable to land towns. The deaths were closely many such vaccines were developed. They're magnified five hundred get air, speedily dies. correlated with the pneumonia rate. At the outset, when it was supposed times." In general, about 30 per cent of the that the influenza bacillus caused patients that developed pneumonia the malady, this germ was utilized. failed to recover; although in San Subsequently, it being fairly demon- the New York Microscopical Society. bered any other single group in the Antonio, where influenza was most strated that the presence of this The entire west wing of the Muse-exhibition. These are the diatoms. prevalent, the pneumonia death rate germ is only incidental, the micro- um of Natural History was crowded or, as they are often called, "the



he can tell us practically nothing, third 'that of the uninoculated "It is not to be expected, under It is true that an organism is known group.' Moreover, 'the average existing conditions, that the great has been given. This organism is lated three times is about one-fifth opportunity to be vaccinated again: also known as the bacillus of I feif- that of the uninoculated. A definite influenza, even should another ep fer, the name of its discoverer. The although smaller degree of protec- demic be imminent. Nor is it neces discovery was made almost thirty tion seems to be afforded to those sary, in my opinion, that the average years ago, soon after the influenza who took only one or two inocu- individual should do so. Each case epidemic of 1889. The causal rela- lations,'

of this extraordinary visitation? fluenza and pneumonia in the group vaccine ultimately used may not "The answer appears to be that inoculated three times is about one- contain the influenza virus. . which the name influenza bacillus mortality rate in the group inocu- mass of the population will seek the

tion of this microbe to influenza "This observer believes that the itself, and decision in the matter was surposed to be established. But facts justify the corl lusion that by may advantageously be deferred the experience of the pathologists the use of a pro erly prepared til you have consulted with your

Get Him Now, While the Getting Is Good



-From The Detroit Journal

over he believes that by the use of and probable susceptibility.

a jewel

would be more or less a law unt

A flea from a cat The diatom is indeed N UNUSUAL sight was presented to the visitor who strolled into the American

The wing of a dragon fly

"What's this I'm looking at?" came clear when the larva of a mos. are illustrated on this page. They that the ratio of pneumonia cases to the total population veried from to the total population varied from destroyed, instead of developing life found in fresh water," answers sallies forth to nibble on the hard-5.3 cases per thousand in Spartan- and producing the disease of typhoid the keeper of the young menagerie, working Jersey commuter. The "Well, it's so common, then, that larva dwells in the water and hangs suspended, with the tip of his tail disease germs has been applied to "Oh, you wouldn't be apt to un- resting slightly above the surface

Under the heading of botany came It was the annual exhibition of a series of exhibits that outnumwas only 18.5 per cent. The death organisms already referred to as with microscopes capable of magnifying objects up to several thousand occur in all parts of the globe, from times their original size. Under the Polar seas to the tropies, in both each instrument was a slip of glass fresh and salt water.

on which was placed the object to | Under the microscope the diatom is indeed a jewel. Occurring in an One of these little slips held the infinitude of designs and shapes they wing of a dragon fly. Magnified only present a picture of minute levelinetwork of cables straining tight an nature. These little plants, many extremely fine fabric. Another extimes smaller than the point of a hibit showed human blood magnified needle, have thousands of dets and a thousand times. In this were seen lines, laid out in regular patterns on thousands of round, flattened objects the surface of the shell-like body. which on inquiry were found to be in several varieties the lines run the red corpuscles of the blood and the cause of the red color in the cause of the red color in the scope, though the diatom itself is invisible to the naked eye.

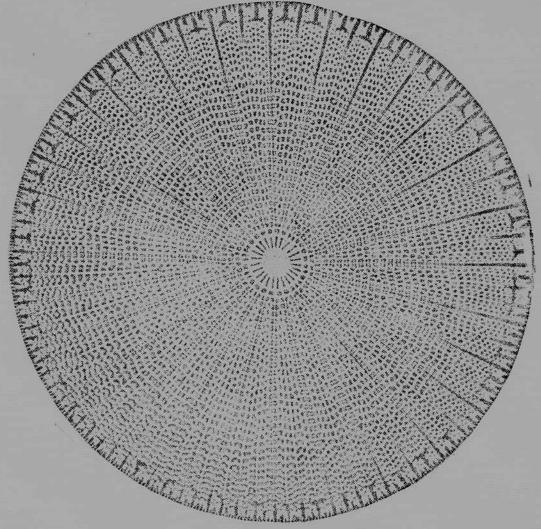
One member was showing the flea Many of the members of the of a cat under his microscope, and Microscopical Society study nothing a fearsome object it was. It looked else but diatoms. One member has as big as an elephant and carried country on the subject, numbering ings they tax the power of the finest band that landed country on the subject, numbering ings they tax the power of the finest band that landed country on the subject, numbering ings they tax the power of the finest band that landed country on the subject, numbering ings they tax the power of the finest band that landed country on the subject, numbering ings they tax the power of the finest band that landed country on the subject, numbering ings they tax the power of the finest band that landed country on the subject, numbering ings they tax the power of the finest band that landed country on the subject, numbering ings they tax the power of the finest band that landed country on the subject, numbering ings they tax the power of the finest band that landed country on the subject in the principal country of them and inquiry revealed the lines of microscopical investigation.

oil on marshes to kill mosquitoes be- | more beautiful diatoms, two of which quito was seen under the micro- are very difficult to photograph. On

account of their extreme transpar-

Larva of a mosquito

The tongue of a fly



The diatom—a picture of minute loneliness

scope the constituent parts of the fact that the microscope is playing a Botany, entemology, zoology, miner-The reason for spreading heavy under the microscope of some of the seen many sections of rock, ground clearness. Fine layers of the pre- lurgical world. In fact, this applies cipal sciences represented.

to many other branches of science as The microscope can detect adulter

ations in food products that are undiscoverable by other methods. In connection with this an interesting story was told about the "ground glass" scare that developed during the war. There were reports from different sections of the country that certain cannel foods contained ground glass. It was suspected that this was the work of German agentand samples of the foods were sen to Washington. The usual analytical methods throwing no light on the subject, some one suggested that they be examined microscopically. This was done and the "ground glass" turned out to be a harmless hard crystalline potash salt that sometimes forms in canned foods.

Of course, the part that the microcope has played in the medical field is well known. At the exhibition were numerous exhibits of microbes and germs. The Board of Hea'th and this attracted a crowd through out the evening.

The New York Microscopical So ciety has been in existence for more than forty years and the annual exhibition held last night was the twenty-sixth. This year the number of exhibitors was well over one hundred and many of them had two oc more microscopes in their exhibit.

Most of the members use the miscroscope as a hobby. As a rule each is interested in one particular branch of microscopical study, and exhibit were photographs made In the mineral department were mineral were revealed with startling greater part every day in the metal- alogy and pathology were the prin-

Unreeling the Past of the ments-that the defensive mechaa newer type of vaccine, in which "Such a consultation should be nism of the body may be developed the germs are suspended in oil (so- made promptly, in any event, should so as to present a practically imcalled lipo-vaccine), it will be pos- any symptoms suggestive of influ- pregnable front to the influenza sible to increase materially both the enza develop. One lesson of the epidegree of protection and the dura- demic is that no layman who is at- lowers the vitality tends to increase

tacked with influenza should attempt susceptibility. "It is true that other observers to treat himself. Medical science "The problem for every inditake a less optimistic view of the has at present no 'cure' for the vidual is to develop his own deprobable benefits of the preventive malady, but the physician is surely fensive mechanism to the highest versational titles. They followed been done and, while it ought to be Put we shook our head. "We vaccine as at present developed, the best judge as to what hygienic stage of efficiency. Obviously I the rules laid down in the primer fine from the producer's standpoint, only want to know about their past It must be recalled, however, that and other measures are calculated to cannot here discuss at length the it is always peculiarly difficult to aid Nature in fighting the original methods by which this may be solved. Soy, 'Willie Decides to Run Away,' actors out of jobs. prove the value of a preventive invasion, and-what is even more accomplished. They may be sum-

vaccine it is possible to rob influ- family physician, who will be the aside from this, it is obvious-in? enza of some of its perils.' More- test judge of your general condition view of the transmission experi-

under one year old, in adults from twenty to forty, and in persons over types of pneumonia germs, were twenty to forty, and in persons over types of pneumonia germs, were that the andayor to make a vaccine that the andayor to make a vaccine to diet. Only, as a tensember them, and in persons over types of pneumonia germs, were the the andayor to make a vaccine to diet. Only, as a tensember them, and in persons over types of pneumonia germs, were the development of pneumonia germs, were the administration to live of the administration to live

sptible to an average invasion of avoiding the malady. If you chance When we went to see George their charming little romance. probable that a measure of speth men in the experiments above
He told us that he had just seen a wear curls in those days. recounted, you probably could not picture called "Crimson Shoals," "Why don't ou go to see D. W. machine and run it off. And right here we put in a bid to be The

Motion Picture Continued from page three

"Here, then, was an epidemic, theless, there is a good deal of evi- for making cultures must contain lemic as that of last winter have "Here the old Greek maxim swered; for we never can mention her bosom. Brother Jack is about shown." some of the traditional plagues of have value. According to one rewe have no way of proving that the
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order to suggest that such vaccines have value. According to one rewe have no way of proving that the
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we have no way of proving that the
order to suggest that such vaccines this agent, we may well suppose; but
the virus is obviously very widely cation. In particular, making a
coming wrought up over it, and floor. Owen Moore sits next to
the virus is obviously very widely disseminated. That specific application, let me adorder to suggest that such vaccines this agent, we may well suppose; but
the virus is obviously very widely cation. In particular, making a
coming wrought up over it, and floor. Owen Moore sits next to
the foreign attendant on a More That was the time when and generally disseminated. That specific application, let me adould be equivalent to saying that monish you not to give too much even the fatigue attendant on a Mary. That was the time when Blossoms," Can it be that in a score bout three persons out of four in attention to the subject of influ quest for the first motion picture they had just become acquainted of years some laily who writes

males, and the death rate was higher among the white population than among the colored.

"It does not appear that there is against influenza is complicated by against influen he average community are insus- enza, even with the thought of could not break our spirit. and every one was talking about pieces for the newspaper will be in-

to be near some one who sneezes. Blaisdell he told us a lot of things They did not dream then that him to tell her about that funny old "Making application of our do not let that worry you. Rather which interested us strangely at the which interested us strangely at the which interested us strangely at the third would be the highest salaried or perhaps there won't general, we may fairly assume, I paying just enough attention to time of the telling—things which we actress in the world and that every newspapers then. Samuel Roink, that such immunity, partial proper hygiene-diet, exercise, never should forget, but when we ingenue under thirty would one day thapfel says that it will be only a complete, is somewhat closely work, recreation, sleeping—your come to set it down none of it rebe wearing curls in emulation of short time before we will buy our

parts, and he gave us a "still" of it. making motion pictures than any

reclated with the individual's genbodily defences are in good workmains. One thing we do remember, her. Why, Mary herself did not
news in reels instead of in papers
and go home and put it in the and go home and put it in the

tack of the malady. But quite get the influenza if you tried." where Francis Ford plays three Griffith? He snows more about Tribune's first camera man.